INSTRUCTIONS TO CANDIDATES

1. Immediately after the commencement of the Examination, you should check that this Booklet does not have any unprinted or torn or missing pages or items, etc. If any of the above defects is found, get it replaced by a Complete Question Booklet of the available series.

2. Write clearly the Question Booklet Version Code A, B, C, D or E, in the appropriate space provided for the purpose, in the OMR Answer Sheet.

3. Enter the name of the Subject, Reg. No., Question Booklet version code and affix Signature on the OMR sheet. As the answer sheets are designed to suit the Optical Mark Reader (O.M.R.) system, special care should be taken to fill those items accurately.

4. This Question Booklet contains 55 questions. Part – A contains 40 questions of one mark each and Part – B contains 15 questions of two marks each. All questions must be attempted. Each question contains four answers, among them one correct answer should be selected and shade the corresponding option in the OMR sheet.

5. All the answers should be marked only on the OMR sheet provided and only with a black or blue ink ball point pen. If more than one circle is shaded / wrongly shaded / half shaded for a given question no marks will be awarded.

6. Questions are in both English and Kannada. If any confusion arises in the Kannada version, please refer to the English version of the questions.

7. Immediately after the final bell indicating the closure of the examination, stop making any further markings in the OMR Answer Sheet. Be seated till the OMR Answer Sheet is collected. After handing over the OMR Answer Sheet to the Invigilator you may leave the examination hall.
Note: English version of the instructions is printed on the front page of this booklet.
PART - A

Answer all questions. Each question carries 1 mark. (1×40=40)

1. Which of the following is not a primary pollutant?
   a) SO₂           b) Volcanic ash
   c) O₃           d) CO₂

2. The earth originated
   a) 4.6 billion yrs. b) 8.5 billion yrs.
   c) 2.6 billion yrs. d) 1.3 billion yrs.

3. The first formed photosynthetic organisms were
   a) Algae           b) Cyanobacteria
   c) Bryophytes     d) Plants
4. The scientifically suggested reason for the extinction of dinosaurs is
   a) volcanic eruptions
   b) massive storm
   c) massive asteroid hit
   d) massive flood

5. Soap does not work well with
   a) hard water    b) light water
   c) heavy water   d) soft water

6. Landsat program began in
   a) 1972    b) 2003
   c) 1982    d) 1992
7. To join the internet, the computer has to be connected to a
   a) internet architecture board
   b) internet society
   c) internet service provider
   d) none of the mentioned

8. Internet works on
   a) Packet switching
   b) Circuit switching
   c) Both a) and b)
   d) None of the mentioned
9. Drug is
   a) produced by endocrine glands
   b) produced by exocrine glands
   c) are secreted through pituitary gland
   d) externally administered chemical substances

10. Lakes and forests are best classified as examples of
    a) artificial ecosystem
    b) natural ecosystem
    c) natural biosphere
    d) artificial biosphere
11. Copernicus is well known for his contribution in the field of
   a) Biology  b) Physics  c) Mathematics  d) Social Science

12. The discovery of 'Cape of Good Hope' goes to
   a) Columbus  b) Vespucci  c) Vagellan  d) Bartolomeu Dias

13. Nanoparticles of which substance were found on the surface of the sword of Tipu Sultan?
   a) Gold  b) Lead  c) Carbon  d) Silicon

14. The size of nanoparticles is between __________ nm.
   a) 100 to 1000  b) 0.1 to 10  c) 1 to 100  d) 0.01 to 1

15. Main branch of mathematics is
   a) Algebra
   b) Geometry
   c) Statistics
   d) Abacus
   ಗಣಿತ ವಿಭಾಗಗಳು
   a) ಅಂಕಗಣಿತ
   b) ಜ್ಞಾನಿಕೀಯ
   c) ಸಾಂಖ್ಯಿಕೀಯ

16. The only metal in liquid state is
   a) iron
   b) mercury
   c) calcium
   d) magnesium
   ಪ್ರತ್ಯೇಕ ವೈಜ್ಞಾನಿಕ ಸಂಶೋಧನೆಯ  ತಾಂತ್ರಿಕ  ವಸ್ತುಗಳು
   a) ಶೈಲಿ
   b) ಮಹಾಮಾರ
   c) ಕಲ್ಸಿಯಮ್
   d) ಮ್ಯಾಗನಸಮ್

17. Stainless steel is so called because of its
   a) High strength
   b) High corrosion resistance
   c) High ductility
   d) Brittleness
   ಸ್ಟೀನ್‌ಸ್‌ ಟೀಲ್‌ ಎಂಬುದು ಎಂಬುದರ ಹೆಸರು
   a) ಉತ್ತಮವಾಗಿ
   b) ಉತ್ತಮವಾಗಿದೆನಾಗಿ
   c) ಉತ್ತಮವಾಗಿರುತ್ತದೆ ಹಾಗಾಗಿ
   d) ಉತ್ತಮವಾಗಿರುತ್ತದೆ ಹಾಗಾಗಿ
18. Layer of atmosphere in which Ozone layer lies is
   a) Exosphere  b) Mesosphere  c) Troposphere  d) Stratosphere

19. One of the best solutions to get rid of non biodegradable wastes is
   a) Burying  b) Burning  c) Recycling  d) Dumping

20. Which state irrigates largest percentage of land?
   a) Haryana  b) Uttar Pradesh  c) Maharashtra  d) Punjab

21. Compound microscope has _______ lens/lenses.
   a) 1  b) 2  c) 3  d) 4

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22. The resolving power of unaided human eye is
   a) 100 µm  
   b) 1000 µm  
   c) 10 µm  
   d) 1 µm

23. Photograph which is taken from microscope is known as
   a) macrograph  
   b) monograph  
   c) micrograph  
   d) pictograph

24. Process in which two light nuclei combine to form a heavy nucleus is called
   a) fusion reaction  
   b) fission reaction  
   c) radioactivity  
   d) transmutation

25. Genetic improvements in which two crops form the basis of the Green Revolution
   a) Corn and rice  
   b) Wheat and corn  
   c) Wheat and rice  
   d) Wheat and sorghum
26. Hard water contains the salts of
   a) Aluminium
   c) Calcium
   b) Carbon
d) Iron

27. INTELSAT IV telecommunication satellite has a capacity of handling
   a) 1 TV channel
   b) 2 TV channels
c) 3 TV channels
d) 4 TV channels

INTELSAT IV సమాధానం చేయాలేదు అందరూ నాణయం కంటే మరక్షణోని చేయడానికి వచ్చిన రూపాను చూడండి?
   a) 1 TV చేపోయి
   b) 2 TV చేపోయి
c) 3 TV చేపోయి
d) 4 TV చేపోయి

28. Headquarters of ISRO is situated
   a) Chandipur
   c) Bengaluru
   b) Chandigarh
d) Chennai

ISRO ప్రధానశాఖా అవసరం సమరిలు
   a) చందిపూర్
   b) చంద్ఘర్
c) బేగలూరు
d) చేమైను
29. Satish Dhawan space centre is situated in
   a) Bengaluru b) Ahamedabad
c) Chennai d) Sriharikota

30. Remote sensing includes gathering of
   a) Images b) Changes
c) Movements d) Sounds

31. Which is the base of scientific development?
   a) Physics b) Chemistry
c) Engineering d) Mathematics
32. Principle of laser is
   a) Spontaneous absorption   b) Simulated emission
   c) Induced emission         d) Both b) and c)

33. Laser is the short form of
   a) light absorption stimulated emission of radiation
   b) light amplification by stimulated emission of radiation
   c) light amplification stimulated emission of rays
   d) light adsorption stimulated rays

34. OFC stands for
   a) Optical Fibre Cables  b) Optic Forced Cables
   c) Optical Forged Cables  d) Optical Fibre Can
35. The most energy efficient and environment safe source of light is
   a) CFL   b) LCD   c) LED   d) LPG

36. The nearly perfect source of energy is
   a) coal  b) natural gas  c) petrol  d) tar

37. DNA is not a genetic material in
   a) Human  b) Virus  c) Plant  d) Animal

38. DNA stands for
   a) Disaccharide Nucleic Acid  b) Diphenyl Nucleic Acid
   c) Diribose Nucleic Acid  d) Deoxyribose Nucleic Acid

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39. The objectives of experiments include
   a) testing hypothesis
   b) for supporting and negating theory
   c) for gathering about natural phenomenon
   d) all the above

40. The detailed report of the whole work prepared in a standard format is called
   a) research
   b) presentation
   c) thesis
   d) scientific paper
PART - B

All questions are compulsory. (2x15=30)

41. Match the correct pair.
   A) Indian nuclear programme
   B) Green revolution
   C) Indian monsoon model
   D) White revolution

   a) A-2, B-3, C-4, D-1
   b) A-4, B-2, C-1, D-3
   c) A-1, B-3, C-4, D-2
   d) A-3, B-1, C-2, D-4

42. ______ and ______ are two major discoveries of 15th century which led to expansion of white colonies outside Europe.
   a) Mariners compass and telescope
   b) Spinning machine and telescope
   c) Gun powder and steam engine
   d) None of the above

15 ಸಾಮಾನ್ಯವಾಗಿ ಬಳಸಲಾದ ಸಾಮಾನ್ಯ ಅನೇಕ ಸಾಮಾನ್ಯ _______ _______ ಮೇಲೆ ಅನೇಕ ಸಾಮಾನ್ಯವಲ್ಲಿಗೆ ವಿಶೇಷವಾಗಿ ಕಾಲಕ್ರಮದಲ್ಲಿ.
   a) ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ
   b) ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ
   c) ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ
   d) ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ ಇನ್ನೊಂದಿಗೆ
43. Match the correct pair.

**Diseases**
- A) Typhoid
- B) Tuberculosis
- C) AIDS
- D) Pneumonia

**Causes**
- 1. Pneumococcus
- 2. HIV
- 3. Mycobacterium
- 4. Salmonella typhi

A) A-4, B-3, C-2, D-1
B) A-3, B-2, C-4, D-1
C) A-2, B-4, C-1, D-3
D) A-1, B-3, C-4, D-2

44. Photovoltaic energy is the conversion of sunlight into
- a) chemical energy
- b) biogas
- c) electricity
- d) geothermal energy

A) ೖ� hakk
B) ೖ� hakk
C) ೖ� hakk
D) ೖ� hakk
45. The outermost layer of the earth is
   a) Magma
   b) Mantle
   c) Crust
   d) Solid iron core

46. LED stands for
   a) Laser Emitting Diode
   b) Light Emitting Diode
   c) Light Emitting Device
   d) Laser Emitting Device

47. Pradhan Mantri Awaas Yojana of Government of India, is meant for
   a) child development
   b) house for individual
   c) skill development
   d) none of the above

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48. Which of the following States in India ranks first in the installation of wind power?
   a) Gujarat
   b) Andhra Pradesh
   c) Maharashtra
   d) Tamil Nadu

49. The observed increase in the average temperature of the air near earths surface and oceans in recent decades
   a) environment change
   b) global warming
   c) health change
   d) none of these
50. Lignite, bituminous, anthracite is the variety of
   a) natural gas  b) wind
   c) petrol        d) coal

51. BTU is measurement of
   a) Volume  b) Temperature
   c) Area     d) Pressure

52. Non conventional energy sources are
   a) biomass, solar, wind
   b) nuclear, coal, petrol
   c) thermal, nuclear, diesel
   d) all the above
53. Name the MOEFCC campaign for land use science or Forest Plus.
   a) Good Wood  
   b) Wood Good  
   c) Wood is Good  
   d) Good Earth  

54. Union Environment ministry approved projects for climate change in which States?
   a) Rajasthan  
   b) Gujarat  
   c) Manipur  
   d) Both a) and b)  

55. The process of introduction of weakened pathogen into a human body is called
   a) vaccination  
   b) immunization  
   c) attenuation  
   d) none of the above  

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